

full leaf. Rather ill-advisedly, as it happened, I decided to leave the top off the tank to allow more efficient evaporation. The following morning, the 2nd June, I arrived at about 10.30 hours to inspect and, to my joy, saw a large empty pupa case protruding from the top of a stick. My delight was soon tempered with apprehension when I realised that the recent occupant was now loose in the glasshouse. However, after a few moments with a net, I had secured a fine male *spheciformis*.

Having composed myself, I returned to the tank to dry the walls of the aquarium, when I was lucky enough to observe the appearance of a pupa thrusting through the bark of a birch twig. I give the timing of the whole operation, from this point until the imago was ready to fly:

1. Pupa broke through bark at 10.51 hrs. but protruded only 6mm. Pupa swelled and shrank several times, but made no forward movement.
2. At 11.12 hrs it suddenly wriggled and completed its protrusion. The pupa was black in colour and quite sharply pointed. The full protrusion measured 1.4cm.
3. At once the two antennae sprang free and the pupa burst. The insect emerged on its back, as it freed itself from the pupa case it righted itself by gripping first the pupal case and then the birch twig.
4. The moth rapidly climbed the twig (6 cm above the exit hole) and, after a brief pause, ascended the sides of the tank and began expanding its wings. Full expansion was achieved 19 minutes after eclosion. The wings at this point were held butterfly-like over the back.
5. After 11 minutes the wings were lowered into the normal position and the insect was ready for flight. The whole operation took 51 minutes.

I was particularly struck by the length of time the insect remained so vulnerable, particularly when the pupa remained partially protruded. For the record, 11 sticks produced 9 perfect moths — 5 males and 4 females. One stick, 3.1 cm diameter, yielded 3 pupae; but two of the largest stumps, some 8 cm diameter, produced no pupae, but masses of frass — suggesting that they contained only first year larvae. E. C. L. SIMSON, Crossbythwaite, Plowden Park, Aston Rowant, Oxford OX9 5SX.

AN UNUSUAL ABERRATION OF THE DUKE OF BURGUNDY FRITILLARY, *HAMEARIS LUCINA* L. — While observing these butterflies on Noar Hill, Hants on 8 June 1986 (and incidentally was pleased that they were in reasonably good numbers) an unusual aberration was seen. At first, on the wing, it looked like a

worn individual but when it settled I was surprised to see that the background colour of the forewings, instead of the usual brown, was a chalky white while the hindwings were normal. Fortunately I was able to obtain a few photographs.

It seems to have been an intermediate form of *ab. leucodes* Lamb as shown under Fig. 24, Plate 8, of *Aberrations of British Butterflies* by A. D. A. Russwurm, (Classey 1978). — S. L. MEREDITH, 5 Rutlish Road, Merton Park, London SW19 3AL.

ISCHNOPSYLLUS SIMPLEX ROTHSCHILD (SIPHONAPTERA) IN SCOTLAND — A female *Ischnopsyllus simplex simplex* Rothschild has been taken from a Natterer's Bat, one of its normal hosts, found dead at Thornhill, Stirlingshire, in August 1986. This flea does not appear to have been recorded from Scotland before. Natterer's Bats are not regarded as common in Scotland though activities by local bat groups are proving it to be slightly more so than previously realised. This bat was found freshly dead and as it was still warm this particular flea had not yet vacated its host.

The upsurge of interest in the conservation and distribution of the Chiroptera in this, the National Bat Year, should produce a corresponding growth in new data concerning their parasites. However, disturbing or handling bats solely in order to remove or examine parasites should be discouraged. It would be illegal under the protective provisions of the Wildlife and Countryside Act (1981) to do so without a licence. Some acarines (mites) found on the same carcase and on that of a Daubenton's Bat brought into the museum earlier in the year remain as yet unidentified. — E. G. HANCOCK, Art Gallery & Museum, Kelvingrove, Glasgow, G3 8AG.

EUPITHECIA ABIETARIA GOEZE (LEP.: GEOMETRIDAE) IN N. W. KENT. — A fine female of this rare species attended my garden m.v. light on July 21st 1986. Chalmers-Hunt (*Butterflies and Moths of Kent* 3, 1968-81) notes only three previous records for Kent, two of these being for N. W. Kent — Lee, 1861 and Gravesend, 1871 — the third being for E. Kent about 1925, while L. and K. Evans (*A Survey of the Macro-Lepidoptera of Croydon and N. E. Surrey*, 1973) lists one for Streatham, 15.vi.1957. Mature spruce plantations have never been a feature of this area, but mature ornamental conifers of many kinds abound and perhaps these have sustained this species at a low density. — B. K. WEST, 36 Briar Road, Bexley, Kent.

Current Literature

Country Life Guide to Dragonflies and Damselflies of Britain and Northern Europe By R. Gibbons. 144 pp. numerous colour illustrations. Country Life Books 1986. Boards £12.95 limp £7.95.

It is pleasing to record that the general awareness of Odonata